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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,953	03/05/2002	Richard Dominic Wietfeldt	262/287	8385

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EXAMINER

NGUYEN, THUAN T

ART UNIT	PAPER NUMBER
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2685

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/091,953

Applicant(s)

RICHARD WIETFELDT

Examiner

THUAN T. NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Hudson et al. (U.S. Patent No. 6,205,522 B1).

Regarding claim 1, Hudson discloses “a standard interface for interfacing a wireless modem assembly with a host device, comprising: a primary serial interface configured to support data communication between the host device and the wireless modem assembly; a secondary serial interface configured to support data communication between the host device and the wireless modem assembly or to support data communication internal to the wireless modem assembly; and a differential serial interface configured to support data communication between the host device and the wireless modem assembly using a differential signal pair” (Fig. 1 shows interface 118 between a host device 110 and a subsystem 114, and the subsystem may be a wireless modem or any type of modems as described in col. 1/lines 52-67 and col. 4/lines 21-65; Fig. 6 is a detailed of subsystem 114, interface 112 as a primary serial interface –RS-232- and interface 118 as a secondary serial interface as shown in Figure 5 for serial interfaces to module

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120; and USB is known as a differential serial interface; in addition, Figure 6 clearly shows both RS-232 serial interface at 350 and USB interface at 352 can be used for interfacing to host 110).

For claim 2, in view of claim 1, Hudson discloses further “comprising a power interface and a ground interface to the wireless modem assembly” (Fig. 5/item 220).

For claim 3, in view of claim 2, Hudson shows “wherein the power interface supports LVTTTL signaling” (col. 13/line 60 to col. 14/line 15 for low level power signaling support).

For claim 4, Hudson shows further “comprising a wireless modem assembly status interface” (Fig. 14B, item 926).

For claim 5, Hudson discloses further “comprising at least one ADC input to the wireless modem assembly” (Fig. 4, AFE 140 or analog front end as analog input).

For claim 6, Hudson discloses further “comprising a power standby input to the wireless modem assembly” (power save as standby mode, col. 14/lines 4-15).

For claim 8, Hudson further discloses “comprising a plurality of GPIO” (Figs. 4-6 for GPIO 216).

For claim 9, Hudson discloses “wherein the secondary serial interface is multiplexed with at least one of the plurality of GPIO interfaces” (Fig. 6/item 358 for GPIO is multiplexed with secondary serial interface to module 120, and again Fig. 5 shows serial interfaces to module 120).

For claim 10, Hudson discloses further “comprising a SIM interface configured to support data communication between the host device and a SIM card included in the wireless modem assembly” (Fig. 6/item 310 for memory interface to auxiliary memory 312 or SIM card).

For claim 11, Hudson inherently shows “wherein the SIM interface comprises a SIM-DATA, SIM-CLK, SIM-RESET, SIMREMOVED, and SIM-VCC signals”, i.e., codes for signaling and control bits for interface (col. 12/lines 1-33 for similar features of codes).

For claim 12, Hudson discloses further “comprising an audio interface configured to provide a buzzer output to the host device, a speaker output to the host device, a microphone input to the wireless modem assembly, and a digital voice interface between the host device and the wireless modem assembly” (Fig. 4, item 150 for a PCM codec in translating or interpreting voice and audio signals with DSP for digital voice processing, as described in col. 5/line 37-col. 6/line 5; and col. 4/lines 50-65 for audio applications with speakers).

For claim 13, Hudson discloses “wherein the speaker output comprises a differential signal pair”, i.e, USB interface for external module 120, and this case, speaker is module 120 (col. 4/lines 50-65).

For claim 14, Hudson suggests “wherein the microphone input comprises a differential signal pair”, i.e, USB interface for external module 120, and this case, a microphone from a speakerphone is the module 120 (col. 4/lines 50-65 & col. 5/lines 37-54).

As for claims 15-19, these claims for “wherein the digital voice input comprises a DV-CLK, DV-FRAME, DV-TXDATA, and DVRXDATA signals”; “comprising a power indicator output to the host device configured to indicate whether the wireless modem assembly is on or off”; “comprising a sleep mode indicator output to the host device configured to indicate whether the wireless modem assembly is in a sleep mode”; “comprising a wake up input to the wireless modem assembly configured to interface a wakeup signal to the wireless modem

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assembly”; and “wherein the primary serial interface is optionally included if the differential serial interface is included in the standard interface” are already addressed earlier.

As for claims 20-27, these claims for “wherein the primary serial interface supports a maximum data rate of 115Kbps”; “wherein the primary serial interface is a universal serial interface that includes a TXD, RXD, CTS, RTS, DTR, and DSR signals”; “wherein the primary serial interface supports a maximum data rate of 2.5Mbps”; “wherein the primary serial interface supports a minimum data rate of 38.4kbps”; “wherein the secondary serial interface is a universal serial bus interface comprising a TXD2 and RXD2 signals”; “wherein the secondary serial interface supports a maximum data rate of 115Kbps”; “wherein the secondary serial interface supports a minimum data rate of 38.4 Kbps”; “wherein the differential serial interface supports a maximum data rate of 2.5Mbps”; and “wherein the standard interface is implemented in a 70-pin connector” are all standards from IEEE and others for standard interfacing, see col. 6/line 57 to col. 9/line 39).

Regarding claims 29 and 31-44, these claims for “a standard interface, comprising: a basic function interface configured to provide at least one serial data communication interface between a host device and a wireless modem assembly; a SIM interface configured to provide a data communication interface between the host device and a SIM card included in the wireless modem assembly; and an audio interface between the host device and the wireless modem assembly” are rejected for the reasons given in the scope of claims 1-6 and 8-28 above.

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Claim Rejections - 35 USC 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action: ‘

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 7 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over (U.S. Patent No. 6,205,522 B1).

Regarding claims 7 and 30, Hudson does not disclose “comprising a JTAG interface”; however, the Examiner takes official notice that this interface is a standard from IEEE 1149. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hudson’s standard interface with a standard interface from IEEE 1149 in order to further include a JTAG interface for communication as preferred.

Conclusion

5. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

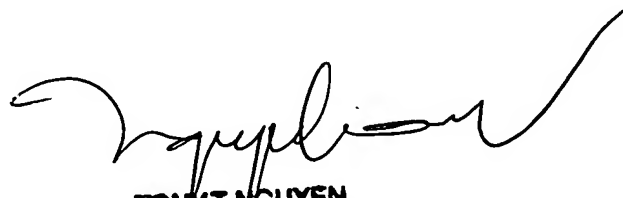
(703) 872-9306, (for Technology Center 2600 only)

*Hand-delivered responses should be brought to Crystal Park II,
2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).*

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony Thuan Nguyen whose telephone number is (703) 308-5860. The examiner can normally be reached on Monday-Friday from 9:30 AM to 7:00 PM, with alternate Fridays off.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Technology Center 2600 Customer Service Office** whose telephone number is **(703) 306-0377**.



TONY T. NGUYEN
PATENT EXAMINER

Tony T. Nguyen
Art Unit 2685
January 20, 2005